

Work Order ID 56053

February 9, 2010 1:24:03 PM



Page 1

Item ID: D3535-15

Accept



Setup Start



Revision ID:

Stop



Item Name: Wearshoe

Start Date: 2/09/10 Start Qty: 6.00



Cust Item ID:

Required Date: 2/15/10 Req'd Qty: 6.00



Customer:

Reference:

Approvals:

Process Plan:

H

Date: *10-2-09*

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3535

Rev B

100



Waterjet

FLOW WATER JET

0.00

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3535 ☐ Dwg Rev: *B* ☐ Prog Rev: *B* ☐ 2-
Deburr if necessary

B 10-2-12

(10)

304.040

110



QC

QC2- Inspect parts off machine FAI/FAIB

0.00

Memo

0.00

Quality Control

B 10-2-12

120



QC

QC8- Inspect parts - second check

0.00

Memo

0.00

Quality Control

10

10-2-12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 56053

February 9, 2010 1:24:03 PM



Page 2

Item ID: D3535-15

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Setup Start



Revision ID:

Stop



Item Name: Wearshoe

Start Date: 2/09/10 Start Qty: 6.00



Cust Item ID:

Required Date: 2/15/10 Req'd Qty: 6.00

Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130



Brake NC

Brake NC

NC BRAKE

Memo

0.00

0.00

1-Form on Brake as per Dwg D3535 using Jigs DT8261 and DT8326 2-Form joggle as per Dwg D3535 using Jig DT8158 3-Identify as D3535-15

Handwritten signature and date 2/10/03/01 with circled 10

140



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

Handwritten date 8/10/03/01

Handwritten circled 10

150



Powdercoat

Powder Coating

Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

Memo

0.00

0.00

START TIME: 3:15pm FINISH TIME: 3:20pm OVEN TEMPERATURE:

Handwritten M112588

Handwritten => JH 10/03/02

Handwritten circled 10 and 9

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Work Order ID 56053

February 9, 2010 1:24:03 PM



Page 3

Item ID: D3535-15

Accept



Setup Start



Revision ID:

Stop



Item Name: Wearshoe

Start Date: 2/09/10 Start Qty: 6.00



Cust Item ID:

Required Date: 2/15/10 Req'd Qty: 6.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00	<i>OK</i>	<i>10-3-3</i>		<i>10</i>			
170 Packaging Packaging	Identify as per dwg & Stock Location: <i>FP-78</i> Memo	0.00 0.00	<i>10</i>	<i>10/03/03</i>		<i>X10</i>	<i>0</i>		
180 QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00							<i>10/03/03</i> <i>ME 10-3-3</i>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

February 9, 2010 1:24:08 PM

Page 1

Work Order ID: 56053



Parent Item: D3535-15



Parent Item Name: Wearshoe

Start Date: 2/09/10

Required Date: 2/15/10

Comments: IPP Rev:A New Issue 07-02-15 JLM

Start Qty: 6.00

Required Qty: 6.00

IPP Rev:B As per Rev B 07-08-31 JLM Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
M304S20GA		Purchased	No			100	sf	229.1294	6.4453	11.		



304/316 .040 Sheet



BRU-2-12

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		

Main Warehouse

MAT

229.1294053

110076

0.40253684

112567

38.0765789

112885

36.9578

113062

145.1723

113077

8.52018947

113062

10

W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	56053
Description: Wearshoe		Part Number:	D3535-15
Inspection Dwg: D3535 Rev: B		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.885	+/-0.010	1.880	✓			
2.000	+/-0.010	2.000	✓			
5.650	+/-0.010	5.650	✓			
9.150	+/-0.010	9.150	✓			
14.400	+/-0.010	14.400	✓			
19.650	+/-0.010	19.650	✓			
24.900	+/-0.010	24.900	✓			
30.150	+/-0.010	30.150	✓			
33.650	+/-0.010	33.650	✓			
35.650	+/-0.010	35.650	✓			
39.150	+/-0.010	39.150	✓			
Ø0.188	+0.005/-0.001	.188	✓			
24.00	+/-0.030	24.00	✓			
16.00	+/-0.030	16.00	✓			
8.00	+/-0.030	8.00	✓			
5.00	+/-0.030	5.00	✓			
0.300	+/-0.010	.301	✓			
0.300	+/-0.010	.300	✓			
0.038	+/-0.010	.035	✓			

Measured by:	BB
Date:	10-2-12

Audited by:	[Signature]
Date:	10-2-12

Prototype Approval:	N/A
Date:	N/A

Rev	Date	Change	Revised by	Approved
A	07.05.10	New Issue	KJ/JLM	[Signature]

W/O:		WORK ORDER CHANGES					
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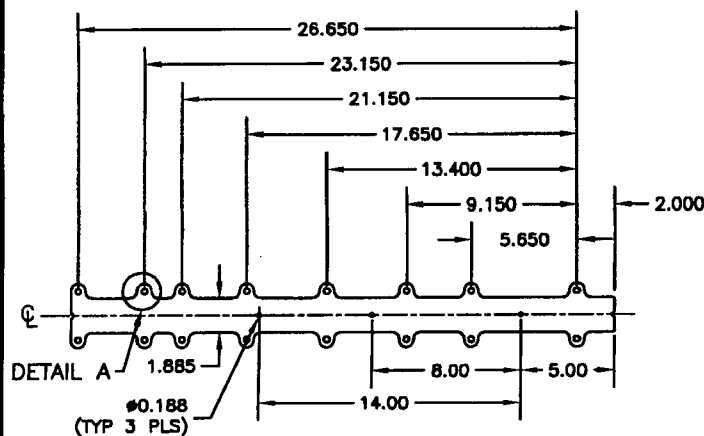
DART

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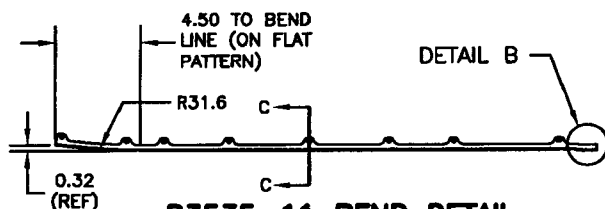
07.04.24

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 50053

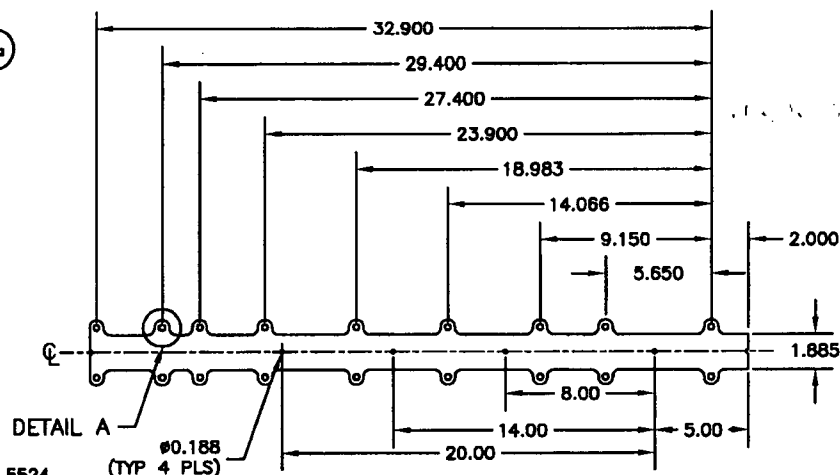
BY 10-2-09



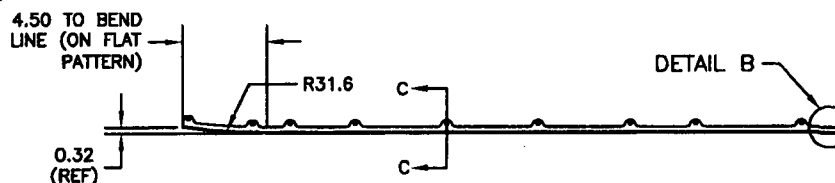
D3535-11F FLAT PATTERN



D3535-11 BEND DETAIL



D3535-13F FLAT PATTERN



D3535-13 BEND DETAIL

NOTES

- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 20 GAUGE (0.038 THICK) (REF DART SPEC M304S20GA)
- 2) FINISH: POWDER COAT GREY SANDTEX (4.3.5.6) PER QSI 005 4.3
- 3) PART IS SYMMETRICAL ABOUT C
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES TO 0.010 MAX
- 7) IDENTIFY WITH DART P/N USING WHITE FINE POINT PAINT MARKER
- 8) SEE PAGE 7 FOR DETAILS AND SECTION

DESIGN	DRAWN BY	DART AEROSPACE USA, INC.
CB	PH	PORT HADLOCK, WA
CHECKED	APPROVED	DRAWING NO.
		D3535
DATE	TITLE	REV. B
07.04.17	WEARSHOE	SHEET 1 OF 7
A	NEW ISSUE	SCALE
06.10.25		1:10
B	MOVE TAB OUTBOARD, ADD AMS SPEC	
07.04.17		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

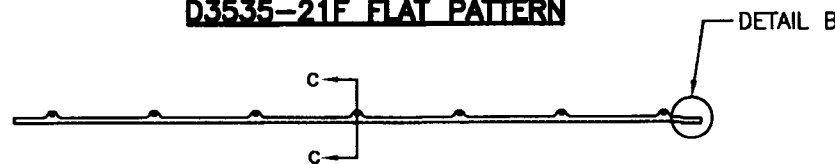
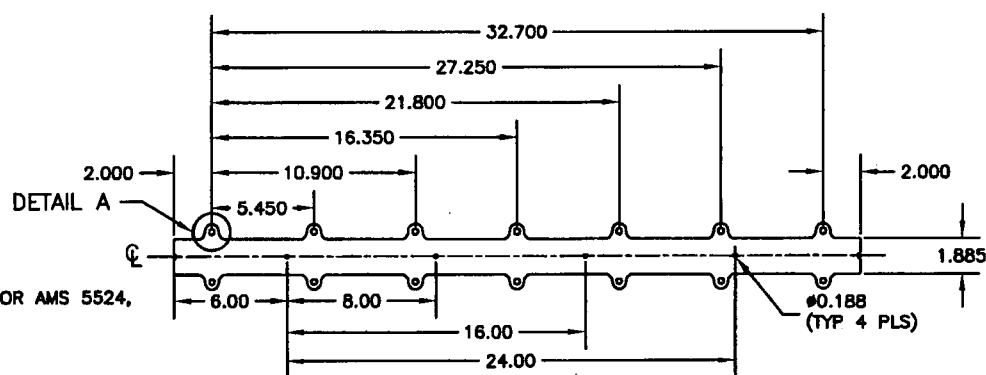
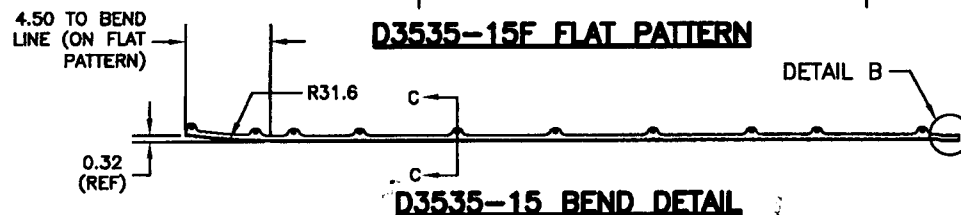
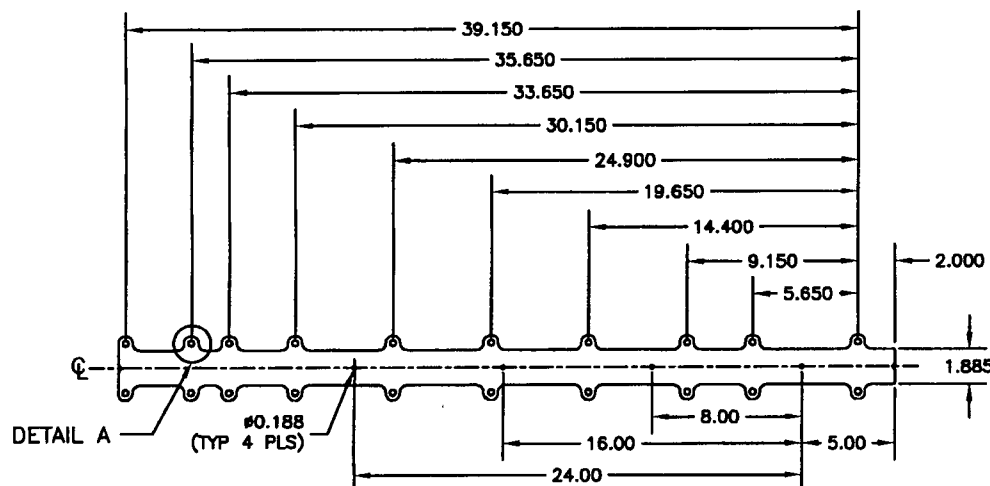
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07.04.24

W/O 56053

DESIGN	DRAWN BY	DART AEROSPACE USA, INC.	
CB	PH	PORT HADLOCK, WA	
CHECKED	APPROVED	DRAWING NO.	REV. B
DATE		D3535	SHEET 2 OF 7
07.04.17		WEARSHOE	SCALE
			1:10



NOTES

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D3535-21F FLAT PATTERN

D3535-21 BEND DETAIL

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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

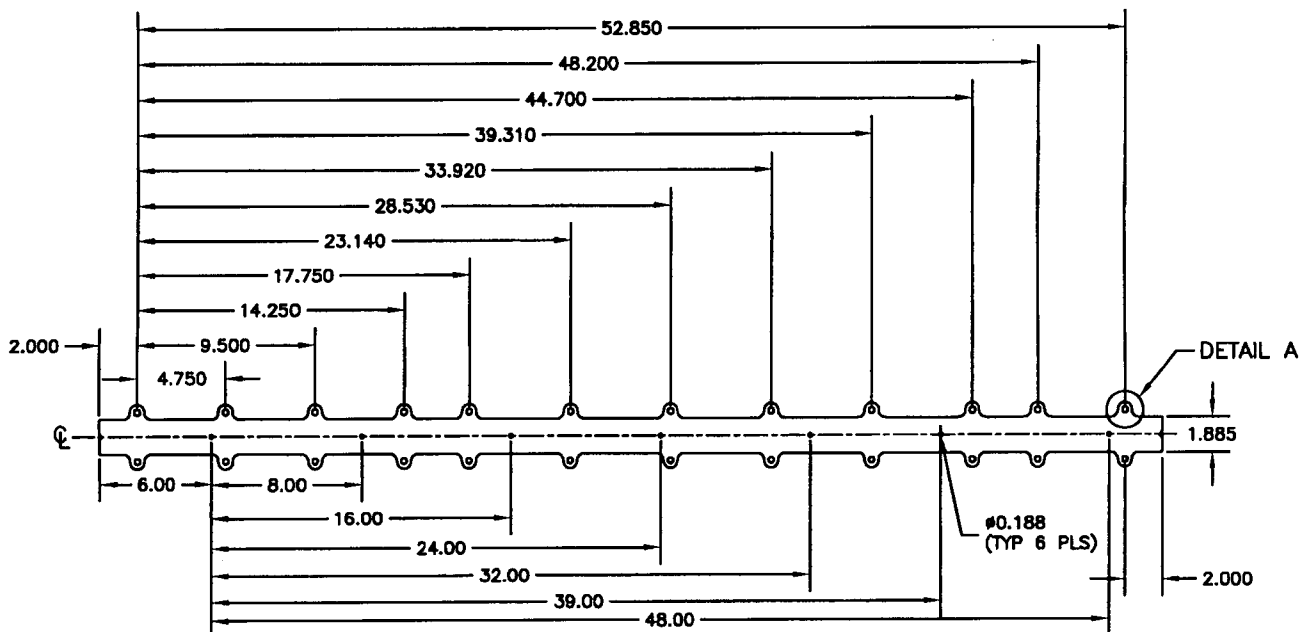
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

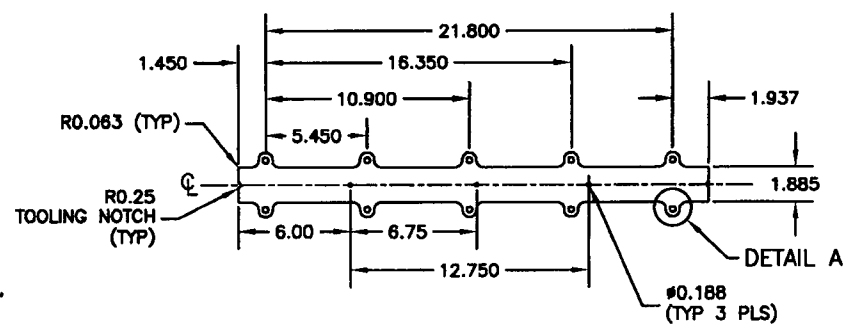
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07.04.24



D3535-23F FLAT PATTERN

D3535-23 BEND DETAIL



D3535-25F FLAT PATTERN

D3535-25 BEND DETAIL

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DESIGN	CB	DRAWN BY	PH	DART AEROSPACE USA, INC.
CHECKED		APPROVED		PORT HADLOCK, WA
DATE	07.04.17	TITLE	D3535	WEARSHOE
		REV. B	SHEET 3 OF 7	SCALE 1:10

4110 56053

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

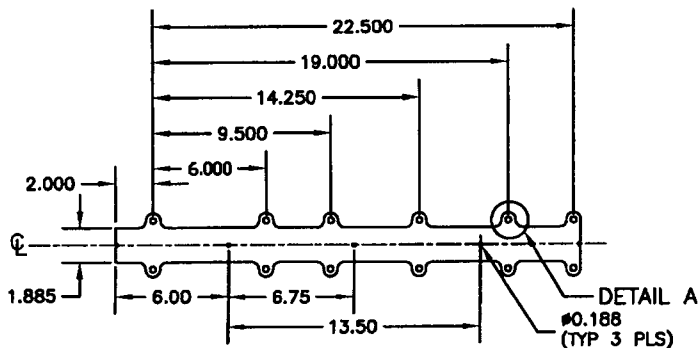
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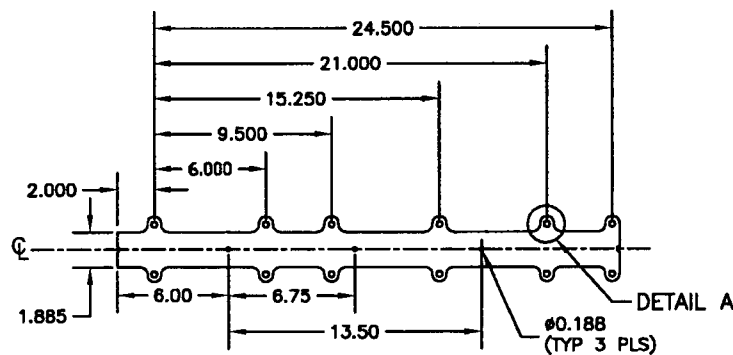
07.04.24



D3535-31F FLAT PATTERN



D3535-31 BEND DETAIL



D3535-33F FLAT PATTERN



D3535-33 BEND DETAIL

NOTES

- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 20 GAUGE (0.038 THICK) (REF DART SPEC M304S20GA)
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CHECKED		APPROVED		PORT HADLOCK, WA
DATE	07.04.17	TITLE	D3535	WEARSHOE
		SCALE	1:10	
		SHEET 4 OF 7		
		REV. B		

410 56053

W/O:		WORK ORDER CHANGES					
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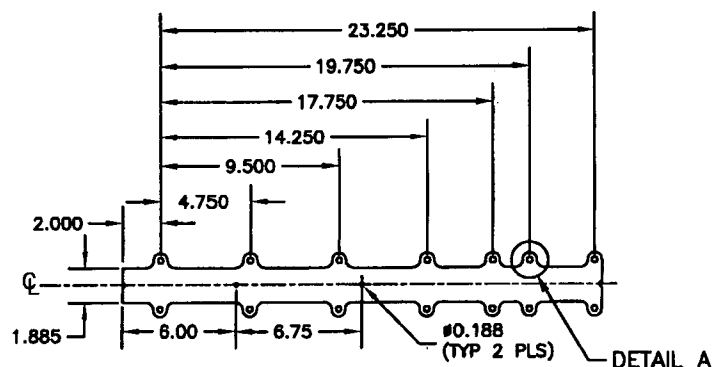
NOTE: Date & initial all entries

DART

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07.04.24

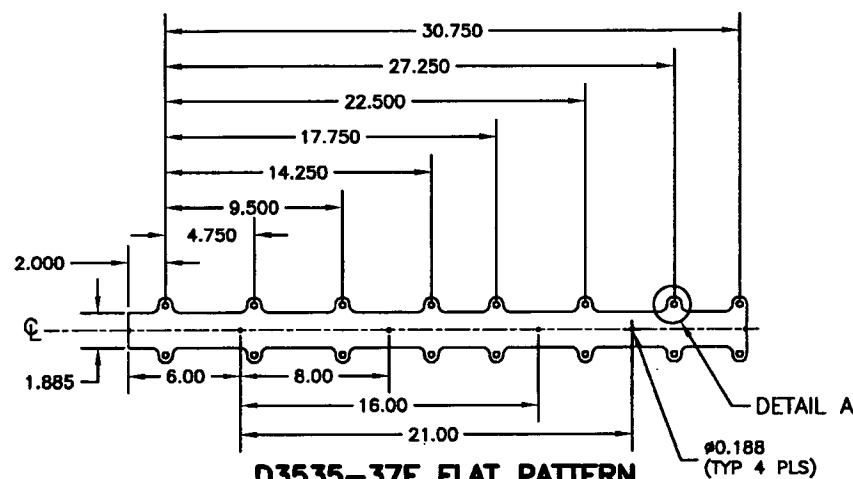
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CB	PH	PORT HADLOCK, WA	
CHECKED	APPROVED	DRAWING NO.	REV. B
<i>[Signature]</i>	<i>[Signature]</i>	D3535	SHEET 5 OF 7
DATE	TITLE	WEARSHOE	SCALE
07.04.17			1:10



D3535-35F FLAT PATTERN



D3535-35 BEND DETAIL



D3535-37F FLAT PATTERN



D3535-37 BEND DETAIL

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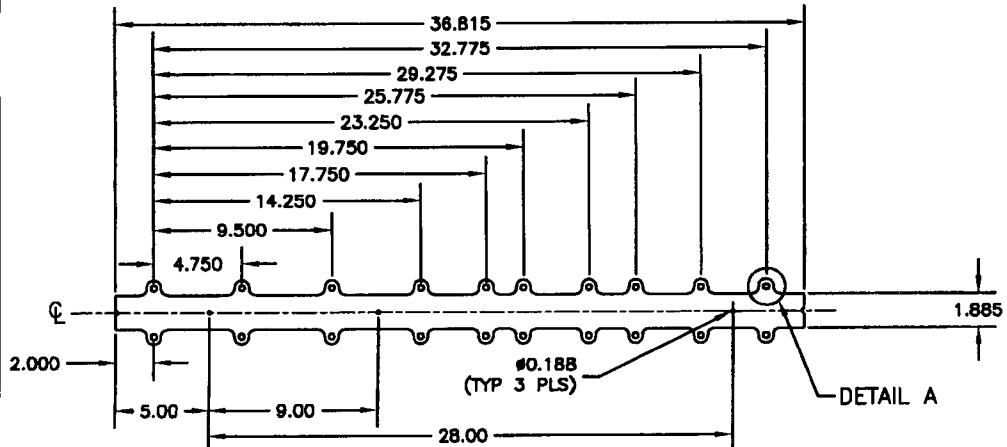
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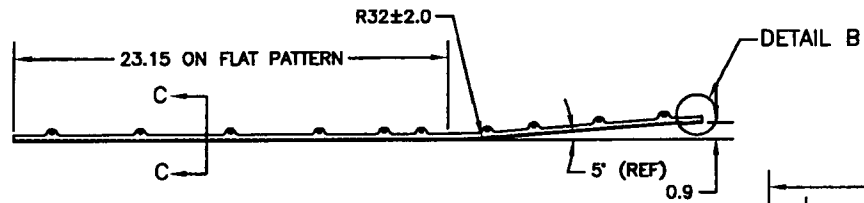
070424

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CB	PH	PORT HADLOCK, WA	
CHECKED	APPROVED	DRAWING NO.	REV. B
		D3535	SHEET 6 OF 7
DATE	TITLE	SCALE	
07.04.17	WEARSHOE	1:10	

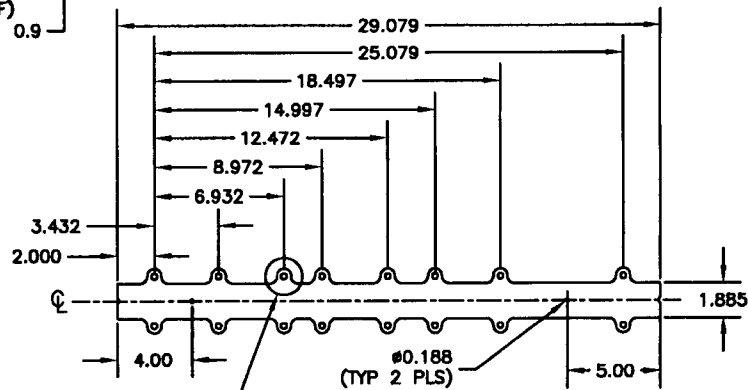
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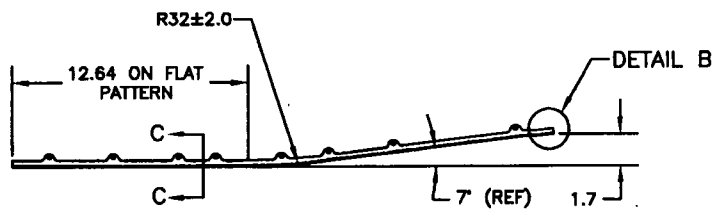
D3535-39F FLAT PATTERN



D3535-39 BEND DETAIL



D3535-41F FLAT PATTERN



D3535-41 BEND DETAIL

NOTES

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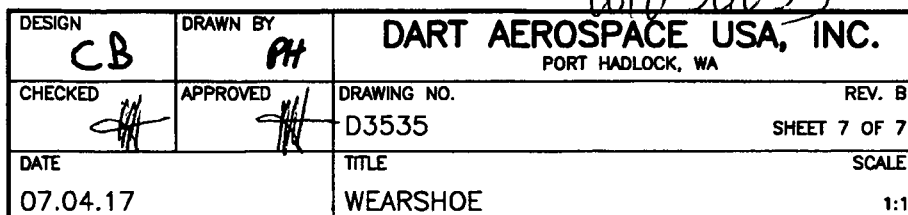
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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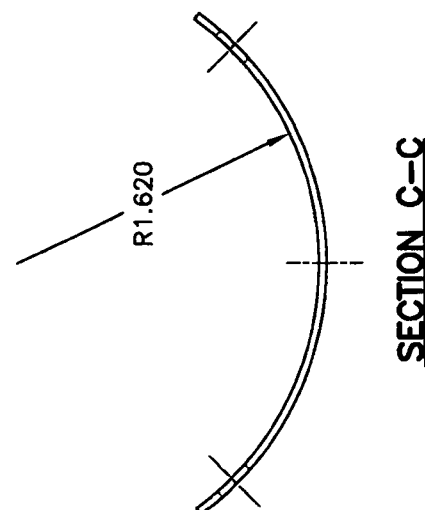
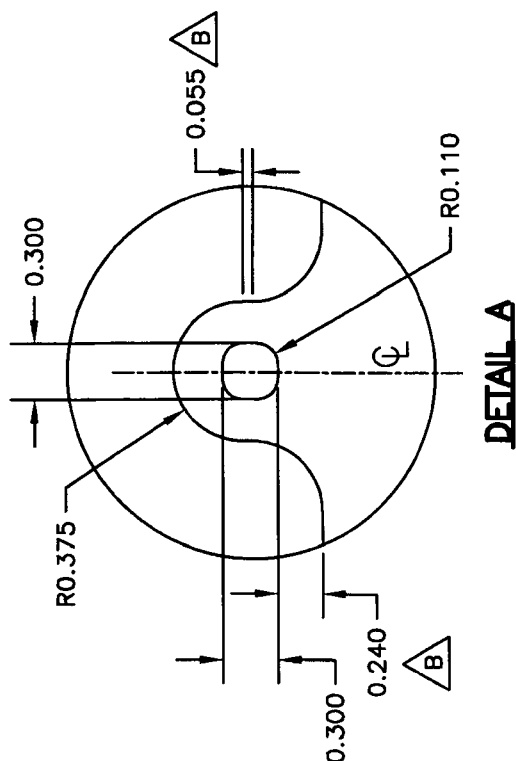
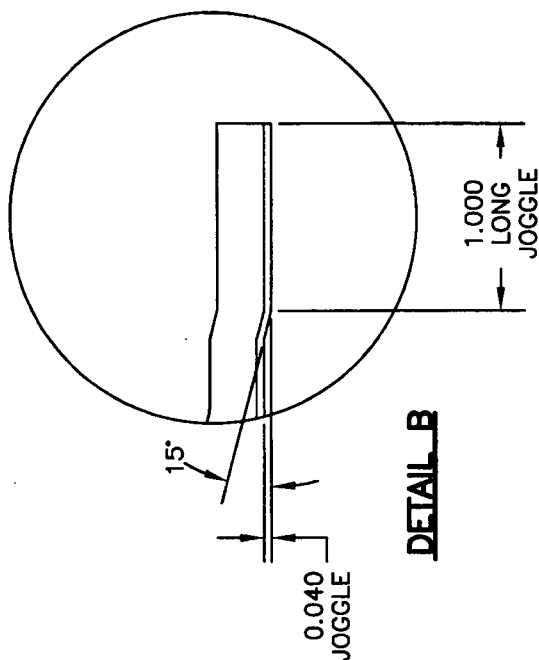
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



07.04.24



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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries